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RAW SEQUENCE LISTING
PATENT APPLICATION: US/10/049,321

DATE: 06/18/2003
TIME: 15:12:55

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3 <110> APPLICANT: Charles, Ian G.

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Xu, Weiming
             Liu, Lizhi
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     12 <141> CURRENT FILING DATE: 2002-02-11
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     20 <160> NUMBER OF SEQ ID NOS: 5
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230 cooccatyco aacyycotyy cooccayyco cocayycoay gaccocycya ayaaagcadc 1200	215 217 218 220 222 224 226 230 232 234 246 246 246 246 250 252 252	<pre><213> ORGAN: <400> SEQUE! agagcggctc ; gttggacgtc ; taaattcccc ; gtttccagcc ; cagcgagcag ; agccatcaga ; cttgacgtct ; acagagaggg ; tgaagccct ; gccaatgtc ; gaaggaccct ; gacgagagcgg ; tgaggaccct ; gccgaggagcgg ; agaggagcgg ; agaggagcgg ; agaggacctg ; aggtggacctg ; cgtggtcctc ; aggtggatctg ; cgtggatctg ; cgtgatctctc ; cagcagagcagatctg ; cgtggatctgatctg ; cgtgatctctc ; cagcagagcagatctg ; cgtgatctctc ; cagcagagcagatctg ; cgtgatctctc ; cagcagagagt ; cgtgatctctc ; cagcagagatctgatctg ; cagcagagatctgatctgatctgatctgatctgatctg</pre>	ISM: human NCE: 4 ttttaatgag actgctaatt ctcacgaccc gctgggtgag cggccgagcg gaagataccc cgcatctcct gcctggtcaa caccgacgg ctgaagcctt atcctcctgg cggaagctag attctgttc gtcagtaagc ggcctcatcc agctatgaca attctgagg acccccaaga tcccaccagc	cgtttcagtg tcgctgagct gagctactta gacgggctca agagaatagt ccctttctg ccatcacttc ccaccagcca gtcagcacct tgaaatcatc ttaccatgga gtctcttcaa cgccgtgat aggccggaga gcgcctgga gccctggag ccatccgggt caccggcgg	atgataggat cacggctcag gcgccgcggc tgatgcctca tcacatctat cctgacctta cttagagaat tgagtgggtg gtcaccccgg ttggcctgat ggatcacatg gcgcaaagtt catctctgac catcattctt ggtactcaga tttcaccacg gacacagccc caaagaacag	aaaggaggga tccctacata tcctccgagg gatctgatcc catgcgtcac ggacacgtcc aaggagagag acgctgagct ctcctgctct agcattgtga ttcggtgttc gggggcctgg ctgattcgtg gcggtcaacg ggcattgcct cacctggaga ctgggtcccc cccctggcag	cattaagaaa tttatgccgc ggcggccggg gcatctaaca ttctagacac caccgcctct gcggatgcag gacgtcaaag ccgtgtagcc ggtcttcaga agcaaatcca gatttctggt ggggcgccgc gccggccctt ctgagaccca ccacctttac ccaccaaagc tggatgggc	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140
	215 216 220 222 224 226 236 236 236 246 246 246 246 256 256 256 256	<pre><213> ORGAN: <400> SEQUE! agagcggctc gttggacgtc taaattcccc gtttccagcc cagcgagcag agcatcaga cttgacgtct gaaatcatgc acagagaggg tgaagccct gacgaccct gacgaccct gacgagagcgg caggaccct gacgagagcgg caggaccct gacgagagcgg caggaccct gacgagagcgg caggacctg agagcagagt cgtggtcctc aggtgatctg cgtggatctg ctcgggtccc</pre>	ISM: human NCE: 4 ttttaatgag actgctaatt ctcacgaccc gctgggtgag cggccgagcg gaagataccc cgcatctcct gcctggtcaa caccgacgg ctgaagcctt atcctctgg cggaagctag atttctgttc gtcagtaagc ggcctcatcc agctatgaca attctgaggg acccccaaga tcccaccagc gggaatggc	cgtttcagtg tcgctgagct gagctactta gacgggctca agagaatagt ccctttctg ccatcacttc ccaccagcca gtcagcacct tgaaatcatc ttaccatgga gtctcttcaa cgcccgtgat aggccggaga gcgcctgga gccctgaagg ccatccgggt caccggccgg ctcagcatgc	atgataggat cacggctcag gcgccgcggc tgatgcctca tcacatctat cctgacctta cttagagaat tgagtgggtg gtcaccccgg ttggcctgat ggatcacatg gcgcaaagtt catctctgac catcattctt ggtactcaga tttcaccacg gacacagccc caaagaacag ctacgatgat	aaaggaggga tcctacata tcctccgagg gatctgatcc catgcgtcac ggacacgtcc aaggagagag acgctgagct ctcctgctct agcattgtga ttcggtgttc gggggcctgg ctgattcgtg gcggtcaacg ggcattgcct cacctggaga ctgggtcccc ccctggcag gggcaggagg	cattaagaaa tttatgccgc ggcggccggg gcatctaaca ttctagacac caccgcctct gcggatgcag gacgtcaaag ccgtgtagcc ggtcttcaga agcaaatcca gatttctggt ggggcgccgc gccggccctt ctgagaccca ccacctttac ccaccaaagc tggatgggc ctggctcact	120 180 240 300 360 420 480 540 600 660 720 780 840 900 960 1020 1080 1140 1200

Input Set : A:\P02379US0.txt

260	cagagtcagc	ctccaaggca	gaggggagaa	caatgaactg	ctcaaggaga	tagagcctgt	1320
262	gctgagcctt	ctcaccagtg	ggagcagagg	ggtcaaggga	ggggcacctg	ccaaggcaga	1380
264	gatgaaagat	atgggaatcc	aggtggacag	agatttggac	ggcaagtcac	acaaacctct	1440
266	gcccctcggc	gtggagaacg	accgagtctt	caatgaccta	tgggggaagg	gcaatgtgcc	1500
268	tgtcgtcctc	aacaacccat	attcagagaa	ggagcagccc	cccacctcag	gaaaacagtc	1560
270	ccccacaaag	aatggcagcc	cctccaagtg	tccacgcttc	ctcaaggtca	agaactggga	1620
					acattggaaa		1680
					catgcaagga		1740
					tttattgatc		1800 -
					ctggaagagg		1860
					ctcatctatg		1920
					tggtccaagc		1980
					tacatctgta		2040
					atattcccc		2100
					cgctacgctg		2160
					ttcacagaga.		2220
					ccgctcctgc		2280
					gtgttggaag		2340
					tggtacggcc		2400
					gcctgtccct		2460
					aactcccgct		2520
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					ttccagagtg		2640
306	cattgttgac	catcactccg	ccaccgagtc	cttcattaag	cacatggaga	atgagtaccg	2700
308	ctaccaaaaa	gactacceta	ccgactgggt	atagatcata	cccccatgt	ccggaagcat	2760
					acccctcct		2820
					gggaccccca		2880
314	agccatcagc	ttcaagaagc	tagcagaagc	tatcaaattc	tcggccaagc	tgatggggca	2940
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334	tatcaacatt	geedagaagg	acaattccct	catcagcaat	gatcgcagct	adaadadaaa	3600
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					caaaacctcc		3720
240	atacaataa	tanatatat	teatacatet	ccacaccaac	gggagccagg	agagecetaa	3780
244	acceaging	gagagata	gtgtgtgtct	tagcaaccaac	gaggacctcg	taataccct	3840
							3900
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					gacgagctcc		4020
					accacgccac		4080
					gagaagcagc		4140
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Input Set : A:\P02379US0.txt

358	gtccctgctg	cagccccgct	actattccat	cagctcctcc	ccagacatgt	accctgatga	4260
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362	ccacggcgta	tgctcctcct	ggctcaaccg	gatacaggct	gacgaactgg	tcccctgttt	4380
364	cgtgagagga	gcacccagct	tccacctgcc	ccggaacccc	caagtcccct	gcatcctcgt	4440
		accggcattg					4500
368	ccaacacaaa	ggaatgaacc	cctgccccat	ggtcctggtc	ttcgggtgcc	ggcaatccaa	4560
370	gatagatcat	atctacaggg	aagagaccct	gcaggccaag	aacaaggggg	tcttcagaga	4620
372	actatacaca	gcttactccc	gggagccaga	caaaccaaag	aagtacgtgc	aggacatcct	4680
374	gcaggagcag	ctggcggagt	ctgtgtaccg	agccctgaag	qaqcaagggg	gccacatata	4740
376	catctataaa	gacgtcacca	tagctactaa	tgtcctcaaa	gccatccagc	gcatcatgac	4800
378	ccagcaggg	aagctctcgg	cagaggacgc	cggcgtattc	atcagccgga	tgagggatga	4860
380	caaccgatac	catgaggata	tttttggagt	caccctqcqa	acqtacqaaq	tgaccaaccg	4920
		gagtccattg					4980
		ctggaccctc					5040
386	ctgctgaacc	tttcctctgg	gaccccctgt	gacceteact	ctacctccta	tecttateac	5100
388	tataccetaa	tttccctcct	cagacttctc	gcccctcagt	aatttcctca	gccctcctgg	5160
390	gtttactcct	tgagttttcc	tactacaata	caatgctttt	ctaatctqca	gtggctctta	5220
392	caaaactctg	ttcccactcc	ctctcttacc	gacaagggca	actcacgggt	gcatgaaacc	5280
		ggccgtcgct					5340
		cacaagctct					5400
398	fttttatgat	gacattttgg	ttatacatac	ctatatatat	atatatatat	atatatatat	5460
400	atataataa	ccaggtctct	atccatcctc	ttccctgcac	aagtgtgtcg	atcttagatt	5520
		tcattgaaga					5580
404	cctcatatat	ccataattag	agticcacacc	catgtacctg	aaacatttgg	aagccccata	5640
404	attattataa	ttagaaaggg	ttcagggcat	addagaaaa	gtgggaaatt	gattaaaggg	5700
400	actigectuag	aatgaaagag	acattcccaa	aatttgctgc	atttagattt	tgataccagt	5760
410	gergreecee	ctcatgtgac	atgaacccat	ccaatggatt	gtgcaaatcc	cctccccaaa	5820
110	gagcagagcc	ccagctagaa	tcacttgact	ttaccacate	cattgactga	cccctcctc	5880
111	caccactaca	atccaagggg	cctagaaatt	atgttgttca	aagaagcctg	gtggcaataa	5940
116	cagcaatage	actttgccac	taataactt	tagatagata	acttotecte	agtttttcct	6000
410	agtestaate	tcatacgaac	ctaaacaata	tgaatgaget	aaatgttaaa	actttaatac	6060
410	ataassass	tatcaagtaa	caatatgaata	attattttt	tattcccca	aagcgggctt	6120
420	ccyyaaacaa	ccttggggat	gaaataatga	aaactaatta	aagtggatga	aattaaaaa	6180
422	getyetteac	atgaggtccc	acataacttc	ttccatacca	accacaactt	addatadass	6240
424	agityccata	ctcaggcttg	ttacceteta	cacttcatct	ccaaagtttt	aaacctotta	6300
420	gaaccigico	gacaaataag	ttaccetcaa	ctcacatcaa	aaatagacaa	ccaagtette	6360
420	adtidatitt	ggagccggtg	taatteetee	ctaagaccaa	acctattaaa	tttactctct	6420
430	ggtaggaatt	ggtgggaagg	gategettte	tatactttt	taaatactac	aaattagtgt	6480
432	Cagagladal	ccagaaagag	gatecettig	atactecet	caaacactac	addittagege	6540
434	caggeagee	gggaatgttc	tactact	accetattta	ttatatatata	ctatacagaa	6600
430	aggatggaaa	gggaatgttc	agtatagata	according	attattaat	ttagatatat	6660
438	aaaccacatt	tcttttatat	accycacycy	ggcatatett	geegeeage	caggagaga	6720
440	gctaaagagg	aagtgcactg	geeetettig	tananaga	acagegggg	caccaagacc	6780
442	ccaaaggccc	aggccaggag	actigitaaag	tgaaaaggca	acctatgact	taacttcata	6840
444	tgccatccct	ggcagccccc	accggtgtcc	tgtteetgee	acatggaget	tattagagag	6900
446	ccagctataa	tctcccctgc	cttcctttaa	cccaatttc	etastastas	agggaaggg	6960
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452	tttctttcca	atcctttata	gctttggaga	cgcctcccca	attccccagg	gaaggaaact	7080
454	gttgtgtcca	atccccatta	aagacaaatt	gatcagtgct	ECCC		1124

Input Set : A:\P02379USO.txt

Output Set: N:\CRF4\06182003\J049321.raw

Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

Seq#:1; Xaa Pos. 3,4

VERIFICATION SUMMARY

DATE: 06/18/2003 TIME: 15:12:56

PATENT APPLICATION: US/10/049,321

Input Set : A:\P02379US0.txt
Output Set: N:\CRF4\06182003\J049321.raw

L:52 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:1 after pos.:0